**Test Plan**

**Assignment 1:**

**Looking into this project the best approach method of the testing.**

**Selenium with “BrowserStack” Integration.**

**Since this project requirements are not clear so I will go with standard approach i.e.**

* **Browser testing with Different browsers like Chrome/Firefox etc.**
* **Mobile Browser testing with different Mobiles Phones like Android/iOS.**

## **What is BrowserStack?**

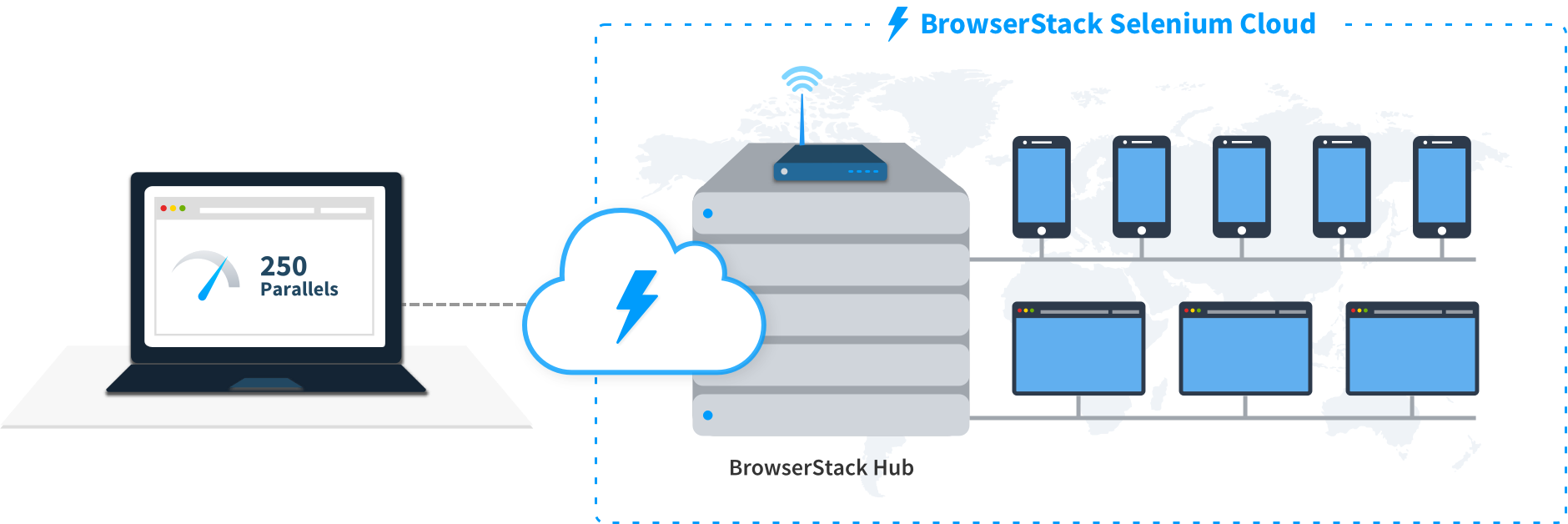
BrowserStack is a comprehensive platform for app and cross-browser testing. It provides developers and testers with instant access to a vast array of browsers and real iOS and Android devices, enabling them to test websites and applications across multiple platforms and devices.

Key features of BrowserStack include:

1. **Cross-Browser Testing:** Developers can test their web applications across a wide range of browsers and browser versions to ensure compatibility and functionality.
2. **Real Device Testing:** BrowserStack allows testing on real iOS and Android devices, providing a realistic environment to identify and fix issues that may arise on different mobile platforms.
3. **3000+ Browsers:** The platform offers access to over 3000 browsers, allowing comprehensive testing across various desktop and mobile configurations.
4. **Quick Launch:** The BrowserStack Quick Launch feature enables users to initiate a new test session in any browser instantly.
5. **Debugging Tools:** BrowserStack provides debugging tools to help developers identify and resolve issues efficiently

## **Selenium with TestNG.**

Your guide to running tests using TestNG on BrowserStack’s Selenium Grid of 3000+ real devices and desktop browsers.



## **Prerequisites**

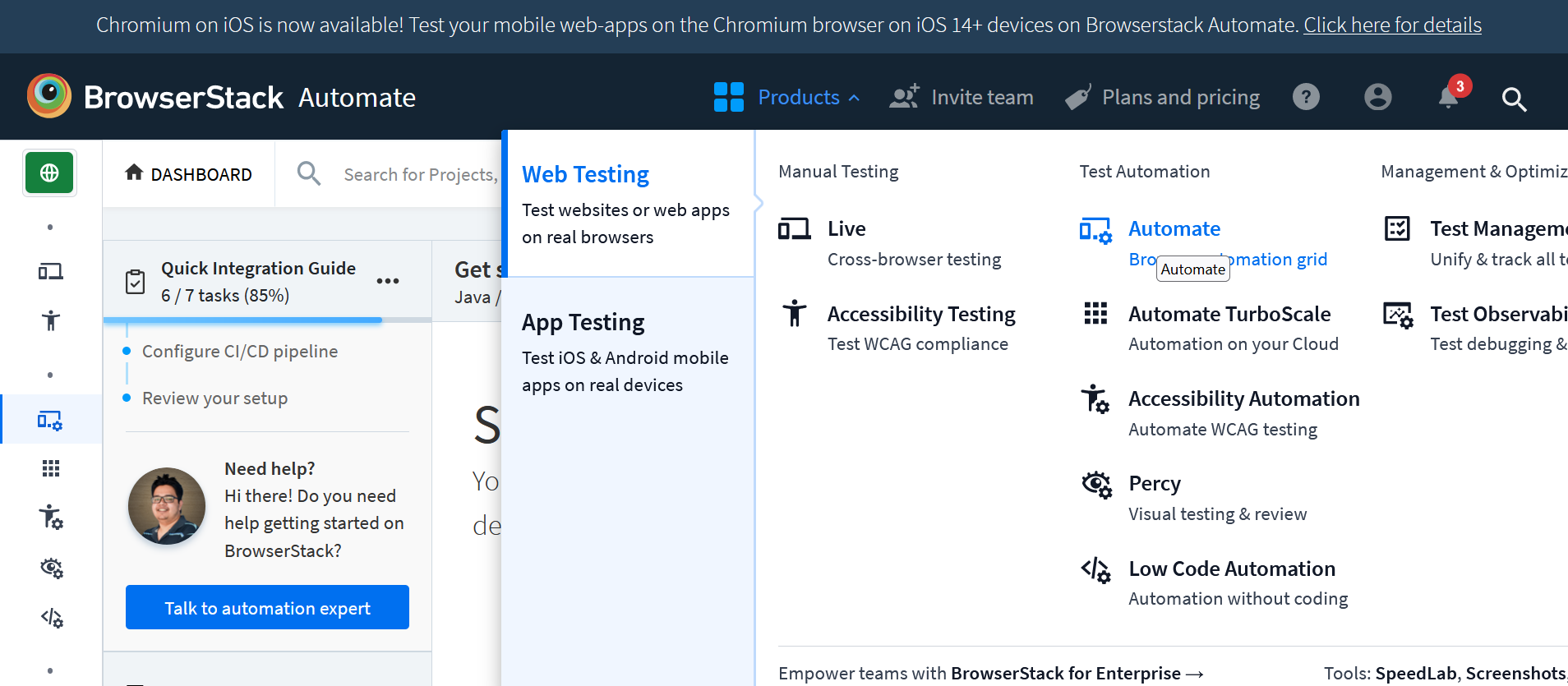
* TestNG v6.8+, Java v8+ (if using Gradle, Java v9+ is required), Selenium v2.5+ (W3C/JSON Wire).
* If you are using Eclipse or IntelliJ IDEA for running tests, install the corresponding TestNG plugin.
* If you are using CLI for running tests, ensure that [Maven](https://maven.apache.org/install.html) or [Gradle](https://gradle.org/install/) are installed on your machine, its environment variables are set, and its bin is added to system path, $PATH.

## **Run a sample build**

Run a sample TestNG test build, which is based on the TestNG runner, using your preferred method on BrowserStack:

### **Get Sample Project from browserstack**

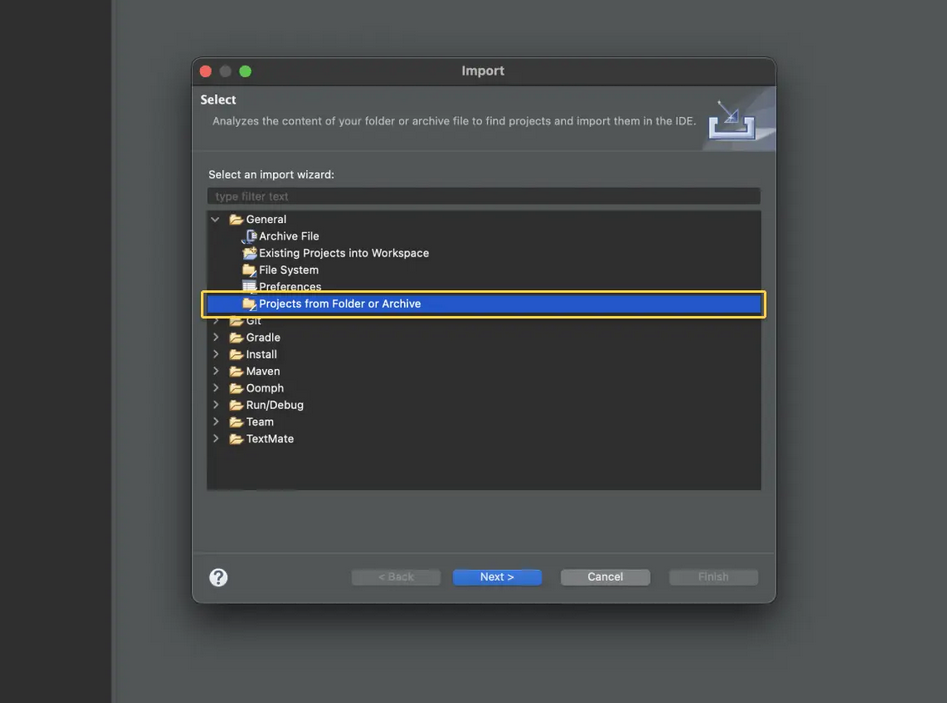
Products🡪Web testing🡪Automate🡪[Download ZIP](https://github.com/browserstack/testng-browserstack/archive/refs/heads/master.zip)



After downloading the sample project, unzip it in the desired location.

## **Import the downloaded project**

Click **File** → **Import**. Expand **General**, select **Projects from Folder or Archive**, and click **Next**. Then, navigate to the earlier unzipped downloaded project.



## **Configure your browserstack.yml config file**

The browserstack.yml file holds all the required capabilities to run your tests on BrowserStack

#### **7.1 Set access credentials**

Set userName and accessKey properties in the browserstack.yml file, available in the root directory, to authenticate your tests on BrowserStack.

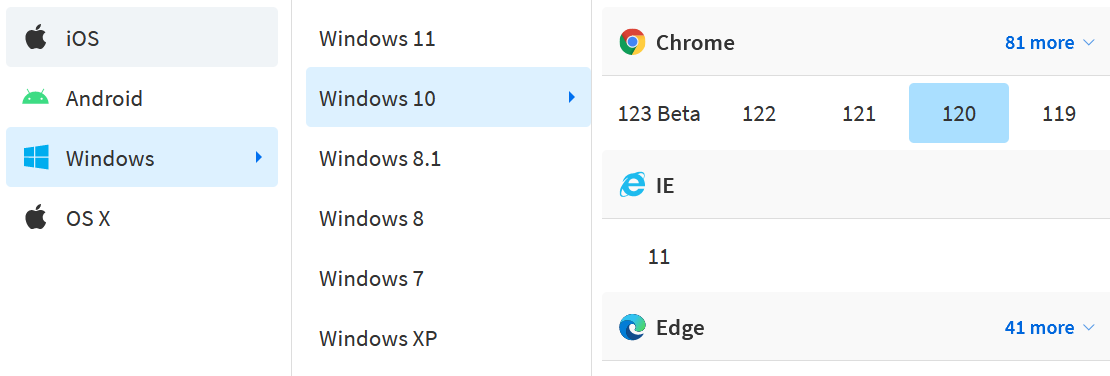
Sample userName and accessKey

**userName:** deekshith\_XXXXXZ

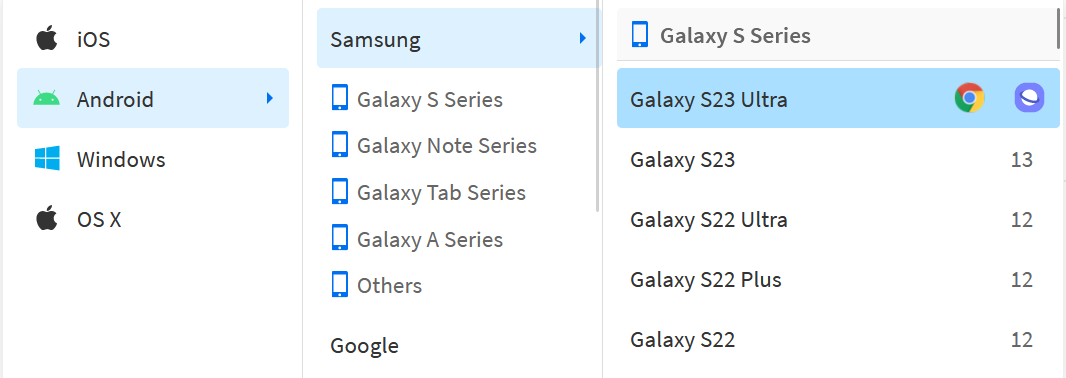
**accessKey:** sVxu2csXXXXXX9TmKy3XC

#### **7.2 Select desktop browsers or real devices from a list of 3000+ available combinations:**

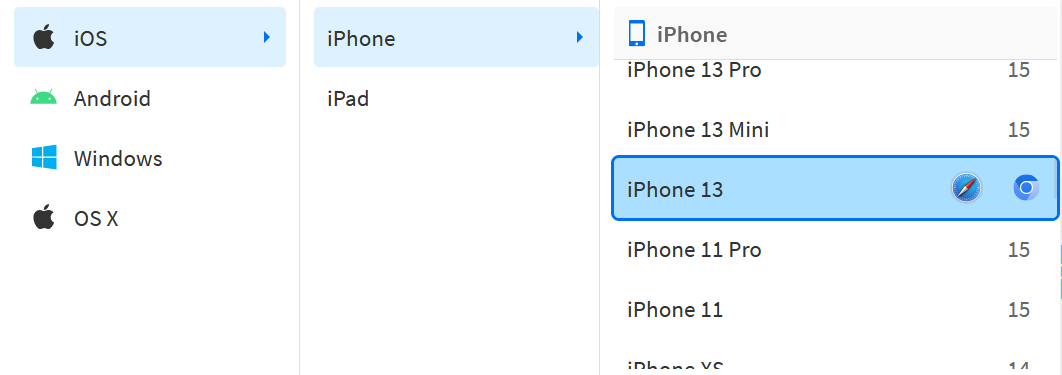
**Parallel thread #1**



**Parallel thread #2**



**Parallel thread #3**



Copy and replace the platforms object in the browserstack.yml file.

**7.3 browserstack.yml file content looks like below:**

userName: deekshith\_AxxxxxZ

accessKey: sVxuxxxxxxR9TmKy3XC

framework: testng

platforms:

- os: Windows

osVersion: 11

browserName: Chrome

browserVersion: latest

- deviceName: Samsung Galaxy S23 Ultra

osVersion: 13.0

browserName: chrome

deviceOrientation: portrait

- deviceName: iPhone 13

osVersion: 15

browserName: Chromium

deviceOrientation: portrait

parallelsPerPlatform: 1

browserstackLocal: true

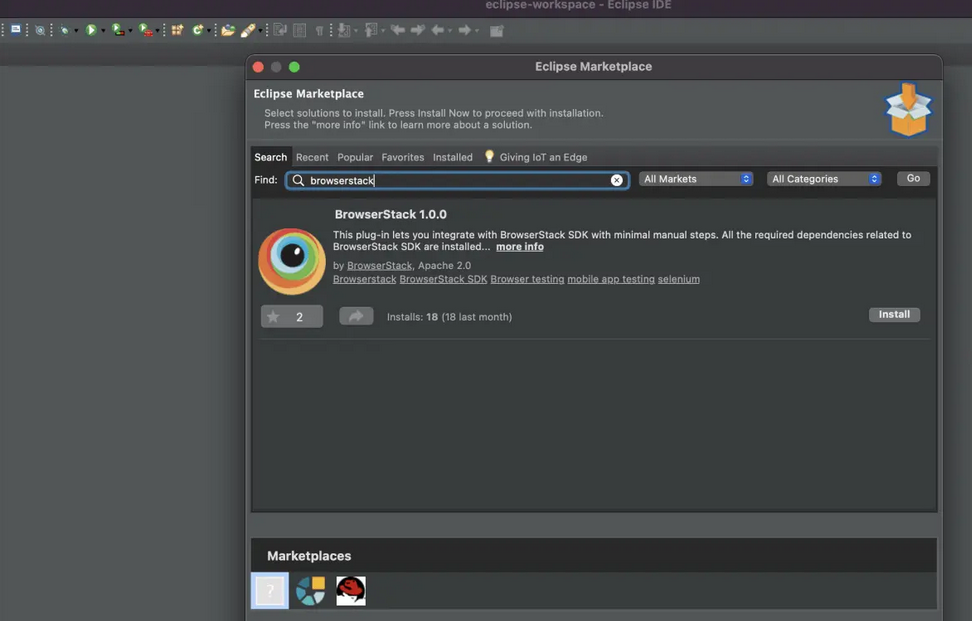
buildName: browserstack-build-1

projectName: BrowserStack Sample

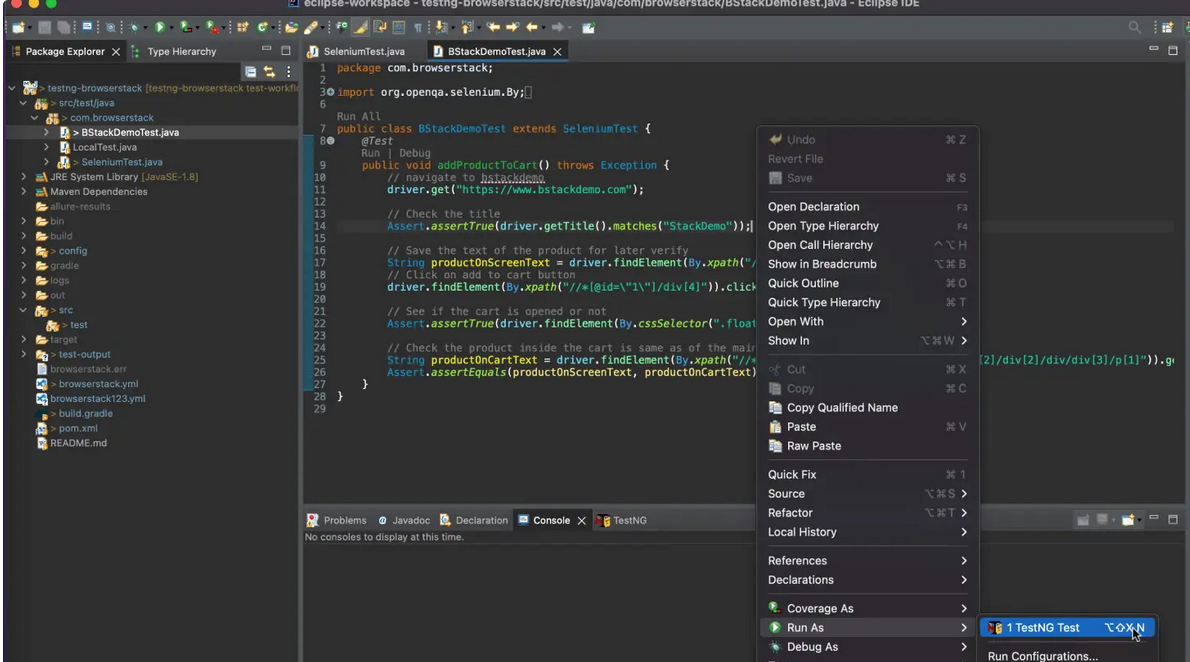
# Using Eclipse to Run Sample Tests on BrowserStack

Install the Browserstack Plugin - on the Eclipse toolbar, click **Help** > **Eclipse Marketplace**.

In the **Eclipse Marketplace**, search for **BrowserStack**, click **Install** > **Finish**.



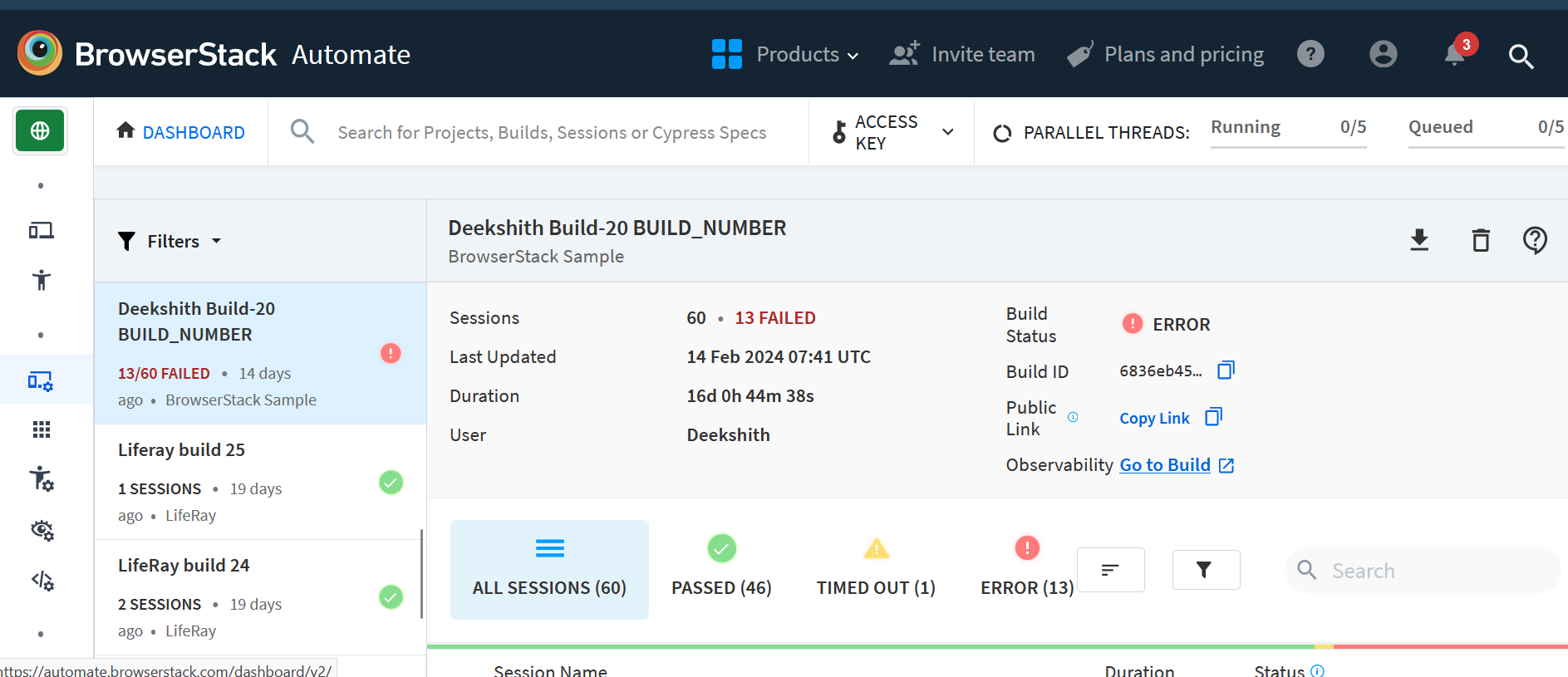
Right-click anywhere on the file **BStackDemoTest.java** 🡪 **Run As** 🡪 **TestNG Test**.



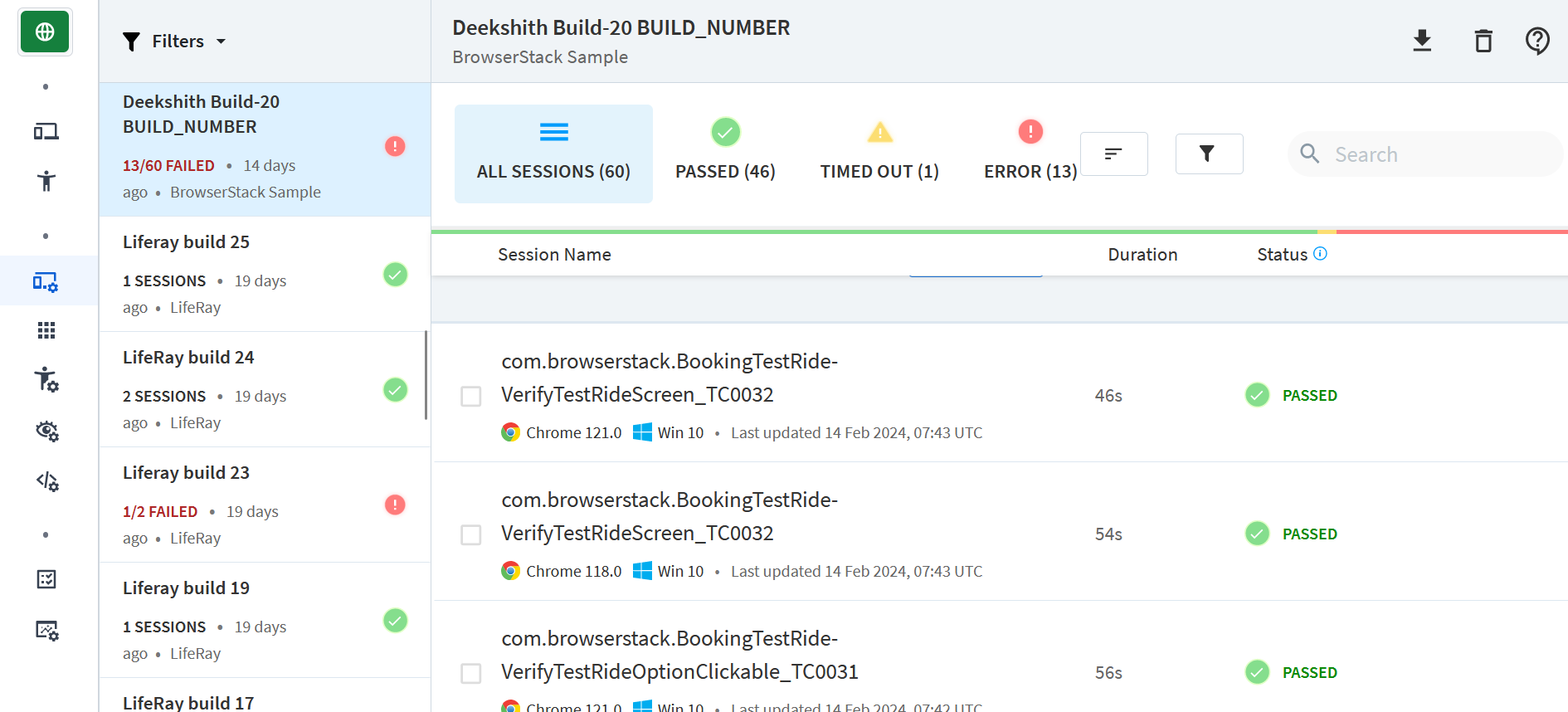
## **View test results on the dashboard**

Login to BrowserStack🡪 Tap on Dashboard 🡪 Select the reports from Filters.

**Screen: 1**



**Screen: 2**



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